

#6

RAW SEQUENCE LISTING

DATE: 10/20/2000

PATENT APPLICATION: US/09/557,796

TIME: 11:48:15

Input Set : A:\557796.txt

Output Set: N:\CRF3\10202000\I557796.raw

4 <110> APPLICANT: Hoch, James
5 Dartois, Veronique
7 <120> TITLE OF INVENTION: METABOLIC SELECTION METHODS
10 <130> FILE REFERENCE: 234/191
12 <140> CURRENT APPLICATION NUMBER: 09/557,796
13 <141> CURRENT FILING DATE: 2000-04-25
15 <150> PRIOR APPLICATION NUMBER: 09/172,952
16 <151> PRIOR FILING DATE: 1998-10-14
18 <160> NUMBER OF SEQ ID NOS: 33
20 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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23 <211> LENGTH: 816
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25 <213> ORGANISM: yia j
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31 ggcgatctgt cggaaactggc gggactgaac aaaagtaccg ttcacgcgtt attacagggg 180
32 ctgcagtcct gcgggtacgt gacgcctgcc ccggcggcgg ggagctatgc gctgacgaca 240
33 aaatttatcc gcgttgccca aaaggcgttg tcgtcgctga atattatcca cgtcgcggcg 300
34 ccgcatcttg aggcgcttaa cctggccacc ggcgagacgg tgaacttctc cagccgtgaa 360
35 gatgaccacg cgatcctgat ttataagctg gagccgacca ccggtatgct gcgtacgcgc 420
36 gcctatatgt gccagcacat gcgctgtact gctcggcaat gggcaaagat ttatatggcg 480
37 tttggccatc ctgactacgt tgagagctac tggaattcac accaggagat tatccagccg 540
38 ctgaccgcga ataccattac cggcttgctt gcgatgcatg atgaactggc gcagatccgc 600
39 gagegaaata tggcgatgga cagggaagag aacgagctgg gcgtgtcgtg cctggctgtc 660
40 cccgtttttg atatccatgg gcgcgtgcct tatgccattt ctatctctct atcaacatcg 720
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54 gtctattctc acggcgtaga ccgctttcct cgcttcaccc agcagttgga taacggcgac 180
55 attatccctg aggtcaacc gcagcgggtg accacgctcg gcgccatcga acagtgggat 240
56 gctcagcgtt ccatcgga cctgacggcg aaaaagatga tggatcgggc cattgagctg 300
57 gcctccgatc acggtatcgg cctggctgcc ttacgtaatg ctaaccactg gatgcgcggc 360
58 ggcagctacg gctggcaggc ggcggaaaaa ggctacatcg gtatctgctg gaccaactcc 420
59 atcgcggtta tggcgccatg gggcgctaaa gagtgcctga tcggtacca cccgctgatc 480
60 gtcgccaatc cgtcgacgcc gatcaccatg gtggatatgt cgatgtcgat gttctcctac 540
61 ggcattgctg aggttaaccg ccttgccggc cgcgaactgc ccgtggacgg cggattcgac 600
62 gatgacggtc gtttgaccaa agagccgggg acgatcgaga aaaatcgccg cattttaccc 660
63 atgggctact ggaaagggtc cggcctgtcg atcgtgctgg atatgattgc caccctcctc 720
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66  ctgcaacgga ttatggattt catcaccacc gccgagcgcg ccgatgaaaa tgtggcggtc      900
67  cgtcttcctg gccatgaatt taccggtctg ctggatgaaa accgccgcaa cgccattacc      960
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79  gcgcttgatt tccgtgcgac gacggatttc cagcgctggg caccgcgctg cgtggaaatc      120
80  gacggccaaa acatcttcgc gcaggttatc gacttaacca ctgcgatgc cgctgaaat      180
81  cgtccggagg tcaccgtcg ctatctggat atccagtttc tggcatcggg cgaagaaaaa      240
82  atcggtatcg ccattgatac cggcaataat caaatcagcg aatctttatt agaacagcgc      300
83  gatattatct tttatcacga cagcgaacat gaatcgttct ttgaaatgac gccaggcaac      360
84  tatgcgatat tttcccgca agatgttcat cgtcctggat gtaataaaac tgtagccacg      420
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97  ccggatattc gcgggctgga gcaaccctgc ctaccctgcc ttgaacatct tcatccgctc      180
98  ggcgacgagt ggttattgag ccataccccc ggacactggc agattgtcgt taccgccatc      240
99  atggaaacca tgcgccgccc cggtgaaaac ggcggctttg ggctggcgct cagcgacgaa      300
100 acgcagcgca aagcctgcgt ggagtactat cgccacctgc agcagaagat cgctaaaatc      360
101 aatggcaata ccgccgaaa ggtcattgcc cttgagcttc acgccgcccc gctggcgggc      420
102 aatgccaaac tggctcaggc taccgacgcc tttgcccggt cattaaaaga aattaccgcg      480
103 tgggactggt cctgcgagct ggtgctggag cactgcgacg cgatgaccgg cagcgcgccg      540
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107 cagaccggcg agtacggcga atggcaggat ttacacgcgc cgttcgcgcc tttctgcccc      780
108 cagagcctga tgaccaccga acacgctcgt gaattatttg cctgcgcagg aaccgcccc      840
109 ctgcaatttt caggcattaa attactggaa attaatgcca gcgcaaacgt tgatcatcgc      900
110 atcgcgatat tacgcgacg catctccgcg ctaaaacaag caciaa                                945
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122 gcgatgcccg gaggtatgga tgccgactta ggtatttcgc ccaccatggc ggggctggcg      180
123 ggcggtattt tctttatcgg ttatctatct ttacaggttc ccggcgggaa aattgcccgt      240
124 caggttagcg gtaagaaatt tatcggtcgg tcgctggtcg cctgggcggt catctccgtg      300
125 ctgacggggg taattaccaa tcagtaccag ctgctggccc tgcgcttctt actgggcgtg      360

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128 gcccactctc caggctggat tatcacggtt ctgcactggc gctggctgtt tattatcgaa 540
129 ggtttgctct cgtcggttgt tctggttctg tgggcataca ccatctatga ccgtccgcag 600
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131 caaaaagcca ttgccggcac cgaggtgaaa aacgcctctc tgagcgccgt tctctccgac 720
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134 atgettgcga tctgcccgtc cgtcggcgcc attgctggga tgttctctgt ttcctccctt 900
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140 gtctattgcc tggcgatctc cctggcgctg gcccgctga tggcgctgct gctgcggcg 1260
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153 tcgcccctgc cgggttacgc cgaacgcgac atgcgccagc tctggcaaca ctgcgcggcg 180
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156 gccatcctct cctccgatcg tcggcgctcg aaaatcgctc agcgtggca gcgggaccgt 360
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180 <211> LENGTH: 660

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188 accgaagggc ttagcgcggt taaagccctg cgcgcccagt gtccggggaa gatcatcgtc 180
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195 aaagatatca acgtcaaaag ctttattgcc gggcgcgcgc tggcaggcgc cccccatccg 600
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208 accgatgaac gccttttcgcg cctggagtgg acccgggccc agcgcgcacg gctggtgagc 180
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217 cctggccagt tccgcgacgt gccgttcggc gaaggatgcg tcgattttgt cggcattttt 720
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238 gcgcaaatcc cggcggtatt ggtccattca cacggccctt ttgctgggg taaagacgcc 540
239 gccgacgcgc tacataacgc cgtggtgctg gaggagtgcg ctacatggg cctcttctcg 600

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246 <212> TYPE: PRT
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252 1 5 10 15
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255 20 25 30
257 Asn Tyr Pro Asn Gly Cys Pro Val Ala His Leu Ser Glu Leu Ala Gly
258 35 40 45
260 Leu Asn Lys Ser Thr Val His Arg Leu Leu Gln Gly Leu Gln Ser Cys
261 50 55 60
263 Gly Tyr Val Thr Pro Ala Pro Ala Ala Gly Ser Tyr Ala Leu Thr Thr
264 65 70 75 80
266 Lys Phe Ile Arg Val Gly Gln Lys Ala Leu Ser Ser Leu Asn Ile Ile
267 85 90 95
269 His Val Ala Ala Pro His Leu Glu Ala Leu Asn Leu Ala Thr Gly Glu
270 100 105 110
272 Thr Val Asn Phe Ser Ser Arg Glu Asp Asp His Ala Ile Leu Ile Tyr
273 115 120 125
275 Lys Leu Glu Pro Thr Thr Gly Met Leu Arg Thr Arg Ala Tyr Ile Gly
276 130 135 140
278 Gln His Met Arg Cys Thr Ala Arg Gln Trp Ala Lys Ile Tyr Met Ala
279 145 150 155 160
281 Phe Gly His Pro Asp Tyr Val Glu Ser Tyr Trp Asn Ser His Gln Glu
282 165 170 175
284 Ile Ile Gln Pro Leu Thr Arg Asn Thr Ile Thr Gly Leu Pro Ala Met
285 180 185 190
287 His Asp Glu Leu Ala Gln Ile Arg Glu Arg Asn Met Ala Met Asp Arg
288 195 200 205
289 Glu Glu Asn Glu Leu Gly Val Ser Cys Leu Ala Val Pro Val Phe Asp
290 210 215 220
292 Ile His Gly Arg Val Pro Tyr Ala Ile Ser Ile Ser Leu Ser Thr Ser
293 225 230 235 240
295 Arg Leu Lys Gln Val Gly Glu Lys Asn Leu Leu Lys Pro Leu Arg Asp
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299 260 265 270
303 <210> SEQ ID NO: 11
304 <211> LENGTH: 332
305 <212> TYPE: PRT
306 <213> ORGANISM: YiaK-Ko
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VERIFICATION SUMMARY

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